(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 27 May 2004 (27.05.2004)

PCT

(10) International Publication Number WO 2004/044487 A3

- (51) International Patent Classification⁷: G02B 5/22, H01J 61/40, C09D 7/02, 183/04, C09B 67/00, C03C 17/00, G02B 5/22, F21V 9/08
- (21) International Application Number:

PCT/IB2003/004753

- (22) International Filing Date: 27 October 2003 (27.10.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

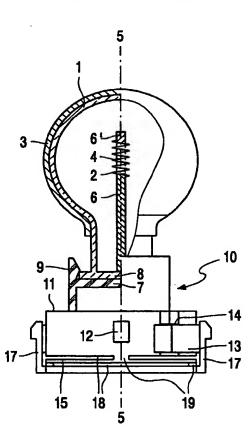
- (30) Priority Data: 02079742.9 14 November 2002 (14.11.2002) EP 03075078.0 13 January 2003 (13.01.2003) EP
- (71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BROERSMA, Rémy, C. [NL/FR]; c/o Prof. Holstlaan 6, NL-5656 AA

Eindhoven (NL). **DREUNING, Hendrik-Jan** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). **HENDRIKS, Rene, J.** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

- (74) Agent: VAN WERMESKERKEN, Stephanie, C.; Philips Intellectual Property & Standards, Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,

[Continued on next page]

(54) Title: LIGHT-TRANSMITTING SUBSTRATE PROVIDED WITH A LIGHT-ABSORBING COATING AS WELL AS A METHOD OF PREPARING A LIGHT-ABSORBING COATING



(57) Abstract: Disclosed is a light-transmitting substrate that is at least partly provided with a light-absorbing coating. The light-absorbing coating comprises stabilized pigments, which are incorporated in a sol-gel matrix. The coating at least comprises an organic pigment and that an aminosilane is present in order to stabilize the pigments. Moreover, an electric lamp comprising a light-transmitting lamp vessel that accommodates a light source is disclosed. Said lamp vessel comprises the above light-transmitting substrate.

ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE,

DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 17 March 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



INTERNATIONAL SEARCH REPORT

PCT/IB 03/04753

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G02B5/22 H01J61/40 C03C17/00 G02B5/22

C09D7/02 F21V9/08

C09867/00 C09D183/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (dassification system followed by classification symbols) IPC 7 CO9D CO9B CO3C GO2B F21V

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

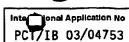
EPO-Internal, PAJ, WPI Data

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Retevant to claim No.
Х	US 5 731 091 A (JONSCHKER GERHARD ET AL) 24 March 1998 (1998-03-24)	1,2,6
Y	column 2, line 15 - line 22 column 2, line 58 - line 67 column 3, line 43 - line 47	3-5,7
X	EP 1 052 230 A (TOYO INK MFG CO) 15 November 2000 (2000-11-15) paragraph '0001! paragraph '0017! - paragraph '0021! paragraph '0042! - paragraph '0043! paragraph '0049! - paragraph '0050! example 1	1,2,6

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents: 'A" document defining the general state of the art which is not considered to be of particular relevance 'E" earlier document but published on or after the international filing date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) 'O' document referring to an oral disclosure, use, exhibition or other means 'P' document published prior to the International filing date but later than the priority date claimed	 'T' later document published after the international filing date or priority date and not in conflict with the application but died to understand the principle or theory underlying the invention. 'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to thivolve an inventive step when the document is taken alone. 'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. '&' document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the International search report
27 December 2004	05/01/2005
Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Matthijssen, J-J

2





INTERNATIONAL SEARCH REPORT

	PC1/18 03/04/33
	Relevant to claim No.
Oldinois of document, may indication, where appropriate, or the following passages	
EP 1 125 998 A (ICHIKO INDUSTRIES LTD) 22 August 2001 (2001-08-22)	3-5,7
paragraph '0001! paragraph '0017! – paragraph '0018! paragraph '0026! – paragraph '0027! paragraph '0030!	1,2,6
WO 01/20641 A (KONINKL PHILIPS ELECTRONICS NV) 22 March 2001 (2001-03-22)	3-5,7
page 2, line 9 - line 14 page 3, line 28 - line 30 page 4, line 24 - line 30 example 1	1,2,6
	22 August 2001 (2001-08-22) paragraph '0001! paragraph '0017! - paragraph '0018! paragraph '0026! - paragraph '0027! paragraph '0030! WO 01/20641 A (KONINKL PHILIPS ELECTRONICS NV) 22 March 2001 (2001-03-22) cited in the application page 2, line 9 - line 14 page 3, line 28 - line 30 page 4, line 24 - line 30 example 1

2

Form PCT/ISA/210 (continuation of second sheet) (January 2004)



INTERNATIONAL SEARCH REPORT

intq—ional Application No PC1/IB 03/04753

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 5731091	A	24-03-1998	DE	4338360	A1	11-05-1995
			DE	59405731	D1	20-05-1998
			WO	9513249	A1	18-05-1995
			EP	0729442	A1	04-09-1996
			JP	9504768	T	13-05-1997
EP 1052230	Α	15-11-2000	JP	2000303025	Α	31-10-2000
4. 1001100			EP	1052230	A1	15-11-2000
EP 1125998	A	22-08-2001	JP	2001226631	Α	21-08-2001
	**		CN	1310211	Α	29-08-2001
			EP	1125998	A2	22-08-2001
			US	2001020812	A1	13-09-2001
WO 0120641		22-03-2001	CN	1321329	T	07-11-2001
	••		WO	0120641	A1	22-03-2001
			EP	1129470	A1	05-09-2001
			JP	2003509825	T	11-03-2003
			ÜS	6819049	B1	16-11-2004